



State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095
(603) 271-3406 FAX (603) 271-7894



February 6, 2003
Letter of Deficiency
DSP #03-012

Ms. Joyce Webster
Crowpond Inc.
P.O. Box 462
Rindge, NH 03461

RE: Crowcroft Pond Dam #203.22, Rindge

Dear Ms. Webster:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that play a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on October 31, 2002. During this visual inspection and/or file review, the following deficiencies were observed:

There is sloughing of the right upstream embankment to the right of the spillway concrete training wall;

2. There is missing soil adjacent to the right end of the spillway, which has exposed the right cut off wall;
3. There are several hairline cracks along the top of the right spillway abutment wall

The left embankment crest is uneven and has missing soil adjacent to the spillway abutment exposing the cutoff wall. There is approximately 12 inches of soil missing on the upstream side of the cutoff wall and 8 inches on the downstream side of the wall;

5. The concrete on the downstream face of the spillway is rough;
6. There is a crack in the right spillway abutment wall approximately 3 feet downstream from the crest of the dam with efflorescence;
7. There was a wet area located approximately 20 feet downstream from the left concrete abutment wall within the rip-rap protection. This water is assumed to be either seepage or runoff from the adjacent wooded area;
8. The stone masonry low level outlet section has partially collapsed. It appears that the upstream most portion of the low level outlet is a pipe, which then transitions to a stone culvert. The ceiling of the stone culvert has a broken stone, which is partially blocking the pipe. In addition, there are several other stones that have fallen from the culvert ceiling and are at the outfall of the pipe;

9. The embankment has a good grass cover that is well maintained.
10. There is soil erosion on the downstream right embankment located 30-40 feet to the right of the low level outlet channel; and

The operations and maintenance plan needs to be reviewed and updated if necessary. Attached is a copy of the plan on file.

DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

September 1, 2003:

1. Repair the sloping on the upstream right embankment adjacent to the right spillway abutment wall;
2. Replace the missing soil adjacent to the right spillway abutment wall where the cutoff wall is exposed;
3. Replace the missing soil adjacent to the left spillway abutment wall where the cutoff wall is exposed. The entire left embankment should be visually checked to ensure that it does not have any low spots along the length and repaired if necessary;
4. Replace the portion of the low level outlet that has failed. It is DES's opinion that the replacement of this portion of the outlet is a "Reconstruction" as opposed to a "Repair". As this is a "Reconstruction" a Dam Reconstruction Permit must be obtained prior to replacing the failed section of culvert. This work must be done under the direction of a New Hampshire Licensed Professional Engineer. Contact this office for guidance;
5. Repair the soil erosion on the downstream right embankment located approximately 30-40 feet to the right of the low level outlet; and
6. Update the O&M plan. Refer to the enclosed copy; and

On a continuing basis:

7. Monitor the wet area in the rocks located 20 feet downstream from the left concrete abutment wall.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

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Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the top of the previous page.

Sincerely,

COPY
Jeffrey M. Blaney
Dam Safety Engineer

Attachments Copy of O&M plan on file, DB13

cc: Gretchen Rule ✓

Town of Rindge

Certified # 1000 1670 0000 0586 1360

JMB/was/h:/safety/wendy/lod/203-22lod.doc